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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,744	09/04/2001	Shigeyoshi Yoshida	0694-149	2676

7590 05/14/2003

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EXAMINER

KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 05/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,744

Applicant(s)

YOSHIDA ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Applicant's election with traverse of the elected species 10, M=Fe, X=Al and Y=O is acknowledged. The traversal is on the grounds that the restriction is improper under Markush practice given in MPEP 803.02, that there is no serious burden on the Examiner to examine the entire application and that the claimed species meet the requirements of Annex B Part 1(f)(i) under the PCT regulations and thus do not lack unity. This is not found persuasive because this case is filed under 37 CFR 371, which means the restriction criteria in MPEP chapter 800 do not apply (See MPEP 801) and the claimed species do not meet the requirement that the species form an art-recognized class of chemical compounds that will behave in the same way in the context of the claimed invention. One of ordinary skill in the art knows alloys, ceramics, composites and thin films comprising a magnetic metal in addition to at least one second element and at least one of F, N and O will all have different magnetic behaviors, even though they may have a saturation magnetization that is 35-80% of the metallic bulk of the magnetic metal. The requirement is still deemed proper and is therefore made FINAL.

Claims 13 and 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement.

The amendment to claim 13 means it is no longer part of the elected species. The Japanese references cited in the Information Disclosure Statement of 4 September 2001 were considered with respect to the provided English abstracts.

WO 01/154145 is the published form of the present application and thus is part of the present application. It should not be part of an Information Disclosure Statement. Accordingly, it has been lined through.

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

The title of the invention is too long under PCT Rule 4.3. A new title is required.

The disclosure is objected to because of the following informalities:

Page 3, lines 8-12 refer to the claims. The specification should not refer to the claims because their numbering and content may change during prosecution. Lines 7-9 of Comparative Example 1 are confusing since they refer to two ratios. It is unclear which ratio is the saturation magnetization ratio and it is unclear what is being measured by the other given ratio. Finally, M_s in examples 1 and 2, used to calculate the saturation magnetization ratio are not the bulk saturation magnetization for Fe. This value is 22,000 G, which is a constant, and the values calculated from the examples are 23,268.7 G and 21,573 G. Applicants need to explain why the M_s in the examples is different from the known bulk value and why they are different from each other. Appropriate correction is required.

Claim 4 is objected to because of the following informalities: “[]” should be deleted. Appropriate correction is required.

Claims 2, 3, 5, 6 and 10-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The bwr ranges of claims 2 and 5 are not found in the specification. The examples teach a bwr range of 148-191%. The exemplified range does not support the claimed ranges which

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include values less than 148 and greater than 191. Claims 3 and 6 are not supported by the specification. Nowhere in the specification is there a teaching that the saturation magnetization ratio is based on the saturation magnetization of X. The claimed anisotropy field range is not supported by the specification. The only teaching of this field is in examples 1 and 2. The values for this field in these examples is 18 Oe and 120 Oe, respectively. These two values do not support the claimed range of 600 Oe or less. There is no teaching in the specification that the grains of M have an average grain size of 1-40 nm. Finally, there is no teaching of a composition having the formula of claim 12. Examples 1 and 2 teach two specific Fe-Al-O compositions. These teachings do not support the claimed generic formula, where α , β and γ are not defined.

Claims 3, 6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 is indefinite since α , β and γ are not defined. Claims 3 and 6 recites the limitation "said metallic magnetic material X". There is insufficient antecedent basis for this limitation in the claims. Claim 1 teaches a metallic magnetic material M.

The Examiner is treating claims 3 and 6, as if X is M, in anticipation of the amendment making this change.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Han et al.

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This article teaches producing a thin film of Fe distributed as granular grains in an alumina matrix by sputtering. This composition would have the claimed formula $\text{Fe}_\alpha\text{-Al}_\beta\text{-O}_\gamma$. Figure 6 shows that this material has an electric resistance in the range of about $100\ \mu\Omega\cdot\text{cm}$ up to about $1000\ \mu\Omega\cdot\text{cm}$ and a saturation magnetization of 10 to 15 kG. The ratio of the taught saturation magnetization to the bulk saturation magnetization of Fe (22 kG) is 45.5-68.2%. This range falls within the claimed ranges. The articles does not teach the brw of the taught composite, the frequency at which the maximum complex permeability occurs, the anisotropy field strength or the particle size of the Fe grains. The taught composite is produce d by the same process as that claimed and therefore must have a brw, a frequency at which the maximum complex permeability occurs, an anisotropy field strength and particle size of the Fe grains that falls with the claimed ranges, absent any showing to the contrary. When the prior art and appellant both describe processes which are indistinguishable, then the products may also be assumed to be inherently indistinguishable. *In re Myers* 159 USPQ 339 (CCPA 1968); *In re Prindle* 132 USPQ 282 (CCPA 1962). Similar processes can reasonably be expected to yield products which inherently have the same properties. *In re Spada* 15 USPQ2d 1655 (CAFC 1990); *In re DeBlauwe* 222 USPQ 191; *In re Wiegand* 86 USPQ 155 (CCPA 1950). The reference teaches the claimed material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (703) 308-3817. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

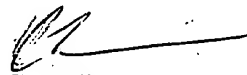
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (703) 308-3823.

The fax number for Amendments filed under 37 CFR 1.116 or After Final communications is (703) 872-9311. The fax number for all other official communications is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661 or (703) 308-0662.

cmk
May 13, 2003



C. Melissa Koslow
Primary Examiner
Tech. Center 1700